

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An oxide superconductor current lead in which metallic electrodes are provided at both sides of a rare-earth based oxide superconductor manufactured by a melting method, joining metal is provided at joint portions formed by said oxide superconductor and said metallic electrodes, and said oxide superconductor and said metallic electrodes are joined by the joining metal,

wherein a volume of holes in the joining metal provided at the joint portions is 5% or less of a volumetric capacity of the joint portions, and a current resistance value is 0.5 $\mu\Omega$ or less when a current of 1000A is flown.

2. (Original) The oxide superconductor current lead according to claim 1, wherein silver coat is provided on a surface of said oxide superconductor joined by the joining metal.

3. (Previously Presented) The oxide superconductor current lead according to claim 1, wherein the joining metal is solder including one or more kind or kinds of cadmium, zinc, and antimony, and one or more kind or kinds of lead, tin, and indium.

4-5. (Cancelled)

6. (Withdrawn) A superconducting system, wherein the oxide superconductor current lead according to claim 1.

7. (Currently Amended) An oxide superconductor current lead which is provided with metallic electrodes at both ends of a rare-earth based oxide superconductor manufactured by a melting method, and transfers a current from and to mating conductors joined to said metallic electrodes,

wherein in at least one of said metallic electrodes, said ~~rod-shaped oxide superconductor is placed in said metallic electrode to be substantially in parallel with an interface between said metallic electrode and the mating conductor, said metallic electrodes and the mating conductors are disposed so as to be overlapped on each other, and a surface area of this overlapped part is larger than a sum of sectional areas of the metallic electrodes and sectional areas of the mating conductors~~metallic electrodes and the mating conductors are disposed so as to be overlapped on each other, and a surface area of this overlapped part is larger than a sum of sectional areas of the metallic electrodes and sectional areas of the mating conductors.

8. (Original) The oxide superconductor current lead according to claim 7, wherein said oxide superconductor has a columnar shape, and is placed so that a longitudinal direction thereof is substantially in parallel with the interface.

9. (Previously Presented) The oxide superconductor current lead according to claim 7, wherein said oxide superconductor is an oxide superconductor produced by a melting method.

10. (Previously Presented) The oxide superconductor current lead according to claim 7, wherein said oxide superconductor is an oxide superconductor made by joining a plurality of oxide superconductors.

11. (Previously Presented) The oxide superconductor current lead according to claim 7, wherein said metallic electrodes and said one or more superconductor or superconductors are joined by joining metal, and

wherein a volume of holes in the joining metal constitutes 5% of a volumetric capacity of joint portions or less.

12. (Previously Presented) A superconducting system, wherein the oxide superconductor current lead according to claim 7.